Claims

1. An isolated nucleic acid sequence comprising a promoter sequence specifically expressed or active in the xylem forming tissue in a plant, **characterized** in that said sequence is chosen among:
   - SEQ ID NO 1 through 5
   - sequences being functionally homologous to any one of SEQ ID NO 1 through 5
   - sequences showing at least 90% homology to any one of SEQ ID NO 1 through 5.
2. The nucleic acid sequence according to claim 1, wherein said sequence is expressed or active in specific stages of xylem formation in a plant.
3. The nucleic acid sequence according to claim 1 or 2, wherein the promoter sequence is expressed or active in a plant.
4. The nucleic acid sequence according to claim 1 or 2, wherein the promoter sequence is expressed or active in a woody plant or a fibrous plant.
5. The nucleic acid sequence according to claim 1 or 2, wherein the promoter sequence is expressed or active in a woody plant, said woody plant being a dicotyledon.
6. The nucleic acid sequence according to claim 1 or 2, wherein the promoter sequence is expressed or active in a plant chosen among poplar, aspen, birch, willow, eucalyptus, sweetgum (liquidamber), spruce, larch, hemlock, pine, cotton, hemp, sisal, flax, wheat, maize, potatoes, and oil seed rape.
7. A transgenic plant exhibiting modified wood formation properties in comparison to the wild-type of said plant, **characterized** in that at least one of the sequences according to claim 1 or 2 is functionally inserted into said transgenic plant.
8. A transgenic plant exhibiting modified apoptosis properties in comparison to the wild-type of said plant, **characterized** in that at least one of the sequences according to claim 1 or 2 is functionally inserted into said transgenic plant.

9. A transgenic plant according to claim 7 or 8, wherein said transgenic plant is a woody plant or a fibrous plant.

10. A transgenic plant according to claim 7 or 8, wherein said transgenic plant is chosen among poplar, aspen, birch, willow, eucalyptus, sweetgum (liquidamber), spruce, larch, hemlock, pine, cotton, hemp, sisal, flax, wheat, maize, potatoes, and oil seed rape.

11. A method for expressing specific genes in the xylem of a plant, **characterised** in that at least one of the sequences according to claim 1 or 2 is used.

12. A method for production of a transgenic plant, **characterised** in that at least one of the promoters according to claim 1 is functionally inserted into the plant.

13. Propagating material of a transgenic plant according to any one of claims 7 through 10, said propagating material carrying said at least one sequence in its genome.

14. Propagating material according to claim 13, said propagating material chosen among seeds, fruits, cuttings and parts of the plants, such as protoplasts, plant cells, calli or roots.

15. A nucleic acid construct comprising a sequence according to claim 1 or 2.

16. A nucleic acid construct according to claim 15, wherein the construct comprises a vector chosen among a plasmid, a cosmid, a virus or a bacteriophage.

17. A nucleic acid sequence capable of hybridising under stringent conditions to at least one of the sequences according to claim 1 or 2.
